AMENDMENT TO THE CLAIMS

1. (Currently amended) A semiconductor memory device, comprising:

a semiconductor substrate having an insulative film in an upper portion of the semiconductor substrate;

a contact plug running through the insulative film;

a memory cell capacitor for storing data, including a first electrode provided above the semiconductor substrate and connected to the contact plug, a capacitance insulating film formed on the first electrode, and a second electrode provided on the capacitance insulating film;

a step reducing film covering an upper surface and a side surface of the memory cell capacitor; and

an overlying hydrogen barrier film covering the step reducing film.

2. (Original) The semiconductor memory device of claim 1, wherein the step reducing film is formed by an atmospheric pressure thermal CVD method using O_3 and TEOS.

3. (Original) The semiconductor memory device of claim 1, wherein the overlying hydrogen barrier film is formed by a sputtering method.

4. (Original) The semiconductor memory device of claim 1, further comprising an underlying hydrogen barrier film provided under the first electrode.

5. (Original) The semiconductor memory device of claim 4, wherein the underlying hydrogen barrier film is in contact with the overlying hydrogen barrier film in a peripheral region around the memory cell capacitor.

6. (Original) The semiconductor memory device of claim 5, wherein the overlying hydrogen barrier film and the underlying hydrogen barrier film are patterned so as to have substantially the same outer shape.

7. (Original) The semiconductor memory device of claim 5, wherein the overlying hydrogen barrier film includes a barrier film covering an upper surface of the step reducing film and a side wall covering a side surface of the step reducing film.

8. (Original) The semiconductor memory device of claim 4, wherein the first electrode is buried in the underlying hydrogen barrier film.

9. (Original) The semiconductor memory device of claim 8, wherein the first electrode includes a conductive hydrogen barrier film in a lower portion thereof.

10-21. (Canceled)

22. (New) A semiconductor memory device, comprising:

a semiconductor substrate;

a memory cell capacitor for storing data, including a first electrode provided above the semiconductor substrate, a capacitance insulating film formed on the first electrode, and a second electrode provided on the capacitance insulating film;

a step reducing film covering an upper surface and a side surface of the memory cell capacitor; and

an overlying hydrogen barrier film covering the step reducing film,

wherein the overlying hydrogen barrier film is made of Al_2O_3, TiN, TiAlN, TiSiN, TaN, TaAlN, or TaSiN.

23. (New) A semiconductor memory device, comprising:

a semiconductor substrate;

a memory cell capacitor for storing data, including a first electrode provided above the semiconductor substrate, a capacitance insulating film formed on the first electrode, and a second electrode provided on the capacitance insulating film;

a step reducing film covering an upper surface and a side surface of the memory cell capacitor; and

an overlying hydrogen barrier film covering the step reducing film,

wherein the overlying hydrogen barrier film is formed by a sputtering method.

24. (New) A semiconductor memory device, comprising:

a semiconductor substrate;

a memory cell capacitor for storing data, including a first electrode provided above the semiconductor substrate, a capacitance insulating film formed on the first electrode, and a second electrode provided on the capacitance insulating film;

a step reducing film covering an upper surface and a side surface of the memory cell capacitor;

an overlying hydrogen barrier film covering the step reducing film, and

an underlying hydrogen barrier film provided under the first electrode,

wherein the underlying hydrogen barrier film is in contact with the overlying hydrogen barrier film in a peripheral region around the memory cell capacitor, and a contact portion between the underlying hydrogen barrier film and the overlying hydrogen barrier film is apart from the memory cell capacitor.

25. (New) A semiconductor memory device, comprising:

a semiconductor substrate;

a memory cell capacitor for storing data, including a first electrode provided above the semiconductor substrate, a capacitance insulating film formed on the first electrode, and a second electrode provided on the capacitance insulating film;

a step reducing film covering an upper surface and a side surface of the memory cell capacitor;

an overlying hydrogen barrier film covering the step reducing film, and

an underlying hydrogen barrier film provided under the first electrode,

wherein the first electrode is buried in the underlying hydrogen barrier film, and the capacitance insulating film is in contact with the underlying hydrogen barrier film.